



Beal Parkway

Corridor Improvements

City of Midland, Texas – October 14, 2014

Prepared by Maverick Engineering, LLC



Introductions

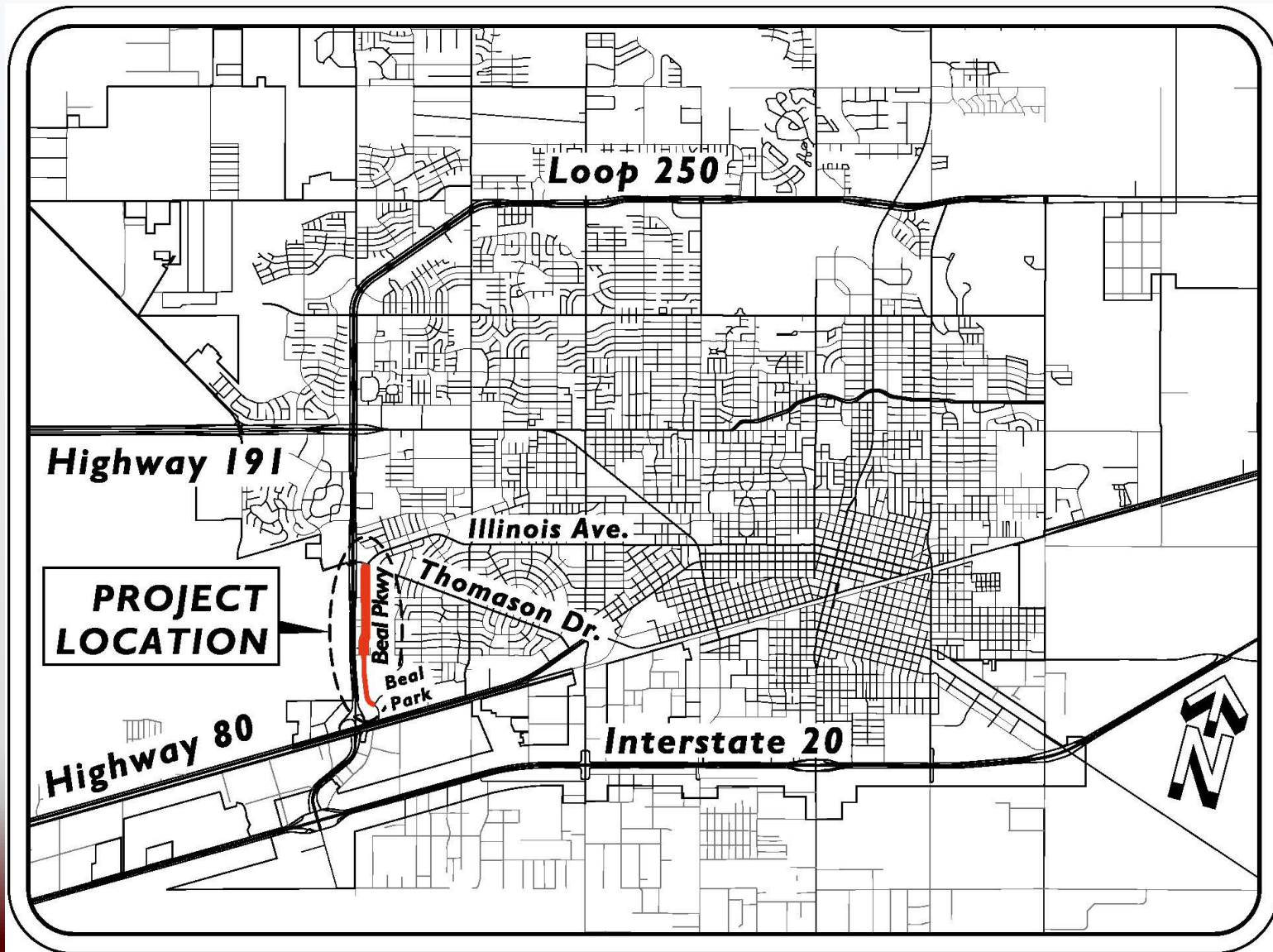
- Sara Bustilloz
 - Public Information Officer—City of Midland
- J.Ross Lacy
 - City Councilman—District 4
- Jose Ortiz, P.E.
 - Director of Engineering Services—City of Midland
- Andrew L. Mellen, P.E.
 - Maverick Engineering
- Matt Carr, P.E.
 - City Engineer—City of Midland



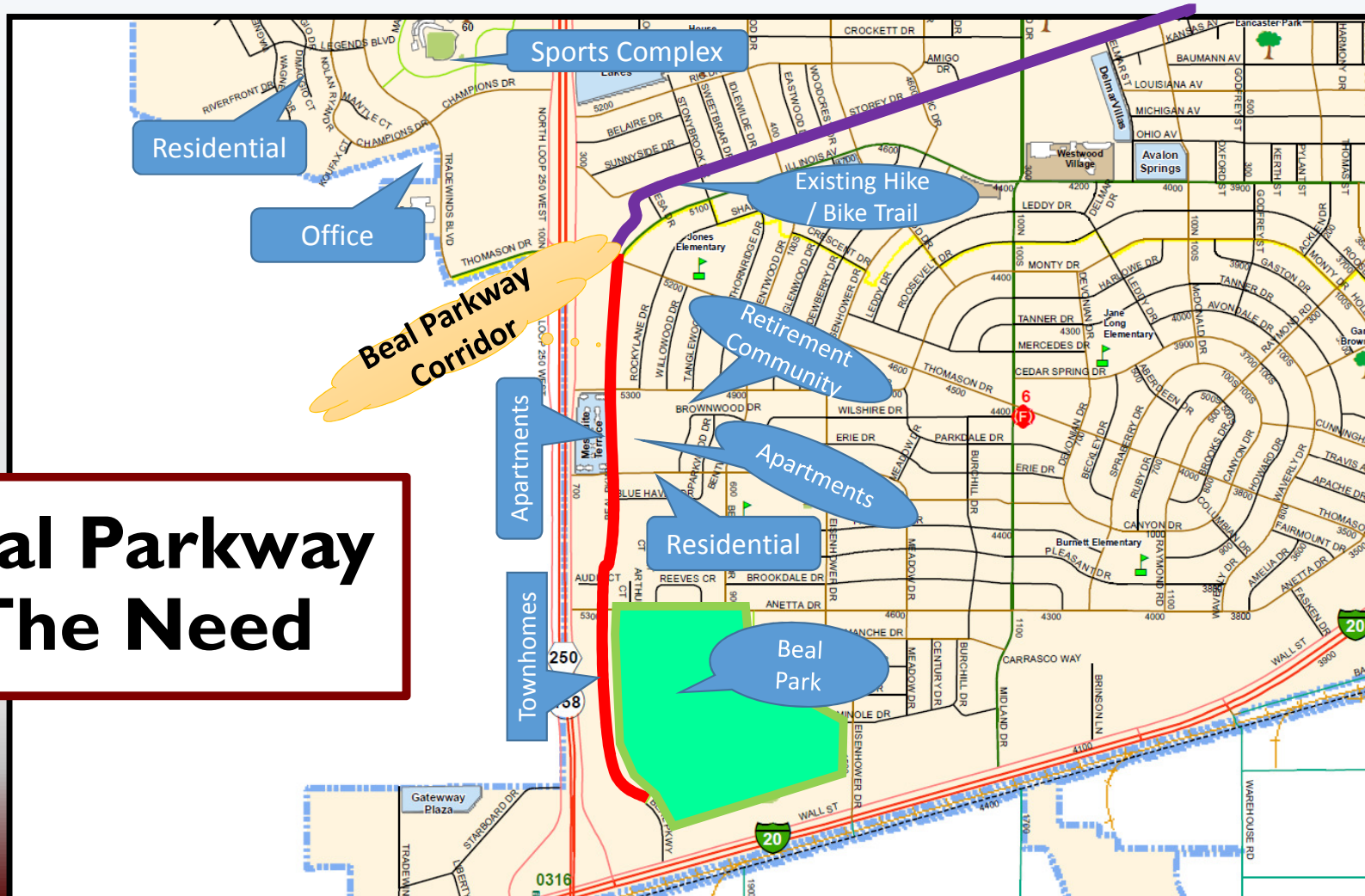
Agenda

- Need and Purpose
- Project History
- Community Input
- Engineering Considerations
- Project Schedule



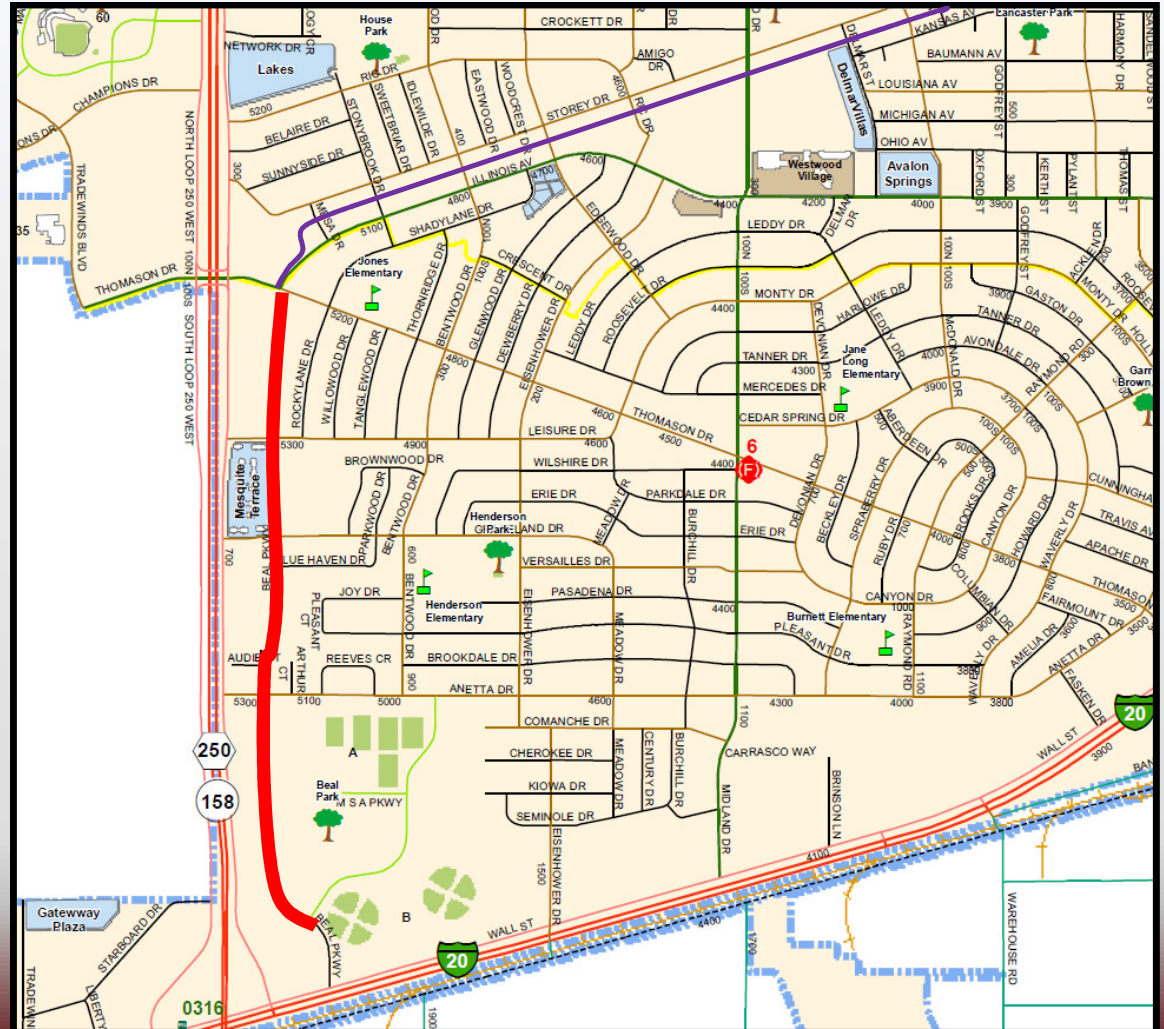


Beal Parkway The Need



Project Purpose

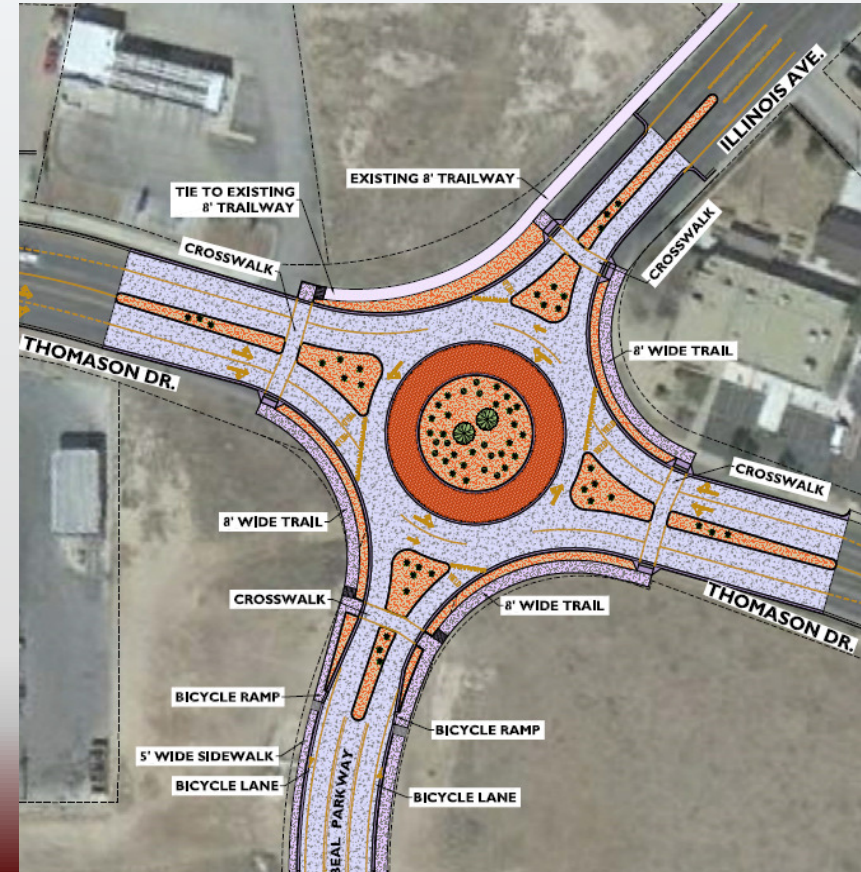
- Complete Beal Parkway between Illinois Ave and Highway 80.
- Reduce neighborhood traffic.
- Extend existing trail system south to Beal Park, making a continuous 3 miles of trails between Beal Park, Doug Russell Pool, and Lancaster Park.



Thomason Dr. – Illinois Ave. – Beal Pkwy. Intersection Options

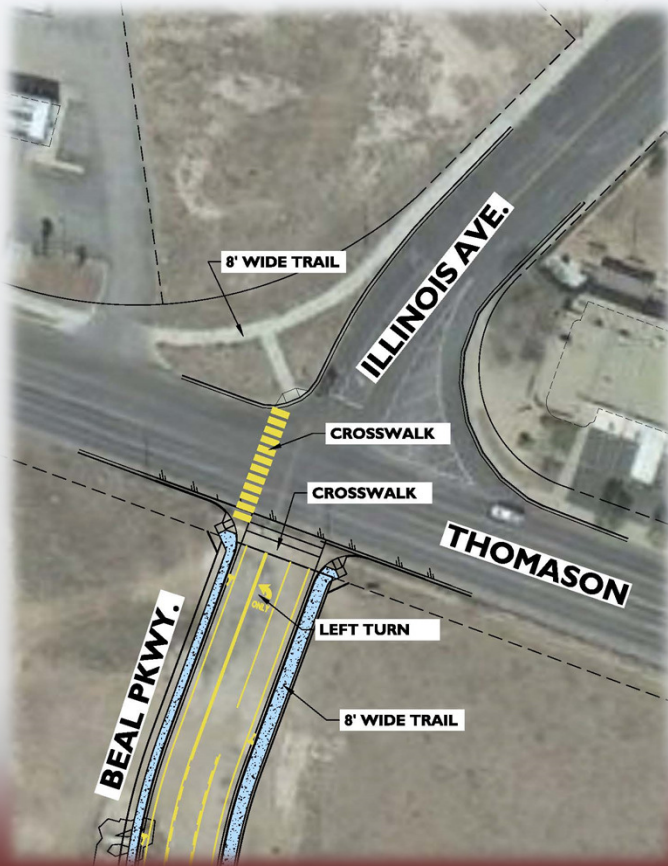


**OPTION A: STANDARD
INTERSECTION**



OPTION B: ROUNDABOUT

Option A: Standard Intersection



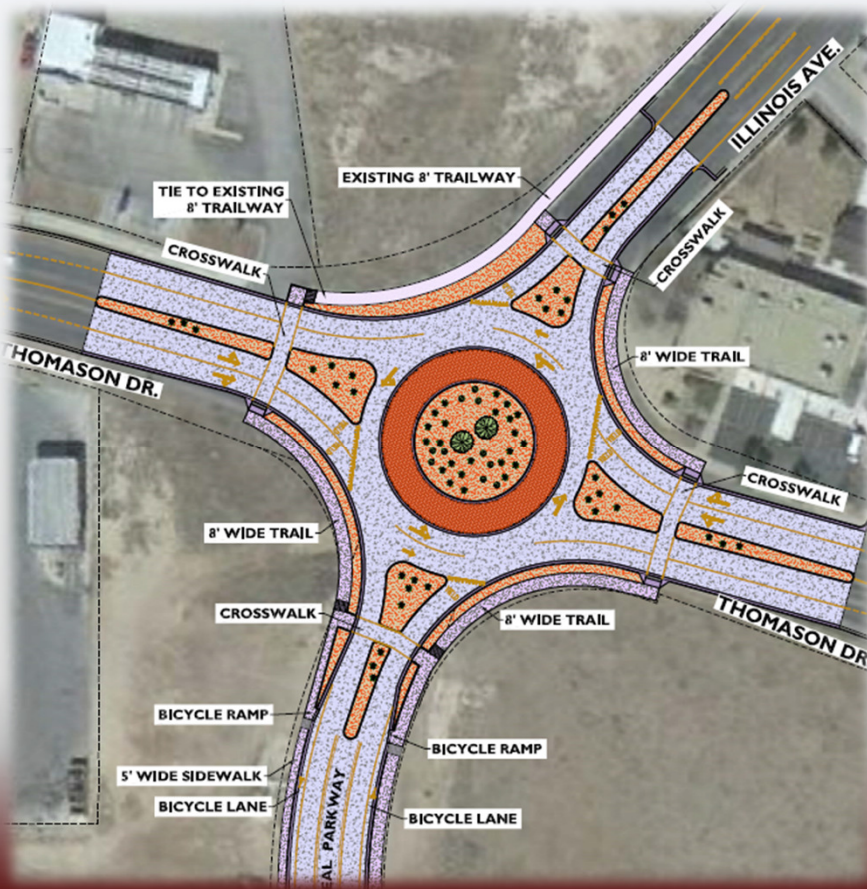
Pros

- Low cost to retrofit intersection
- Minimal disruption to existing traffic

Cons

- Pedestrian Routes connected by a Pedestrian Crossing with Advance Warning Lights
- Thomason Drive traffic will not stop.
- Congestion due to Beal Parkway / Illinois Avenue Traffic attempting left turns or going straight across Thomason
- Traffic through intersection on Thomason moving at 35-40 mph

Option B: Roundabout Intersection



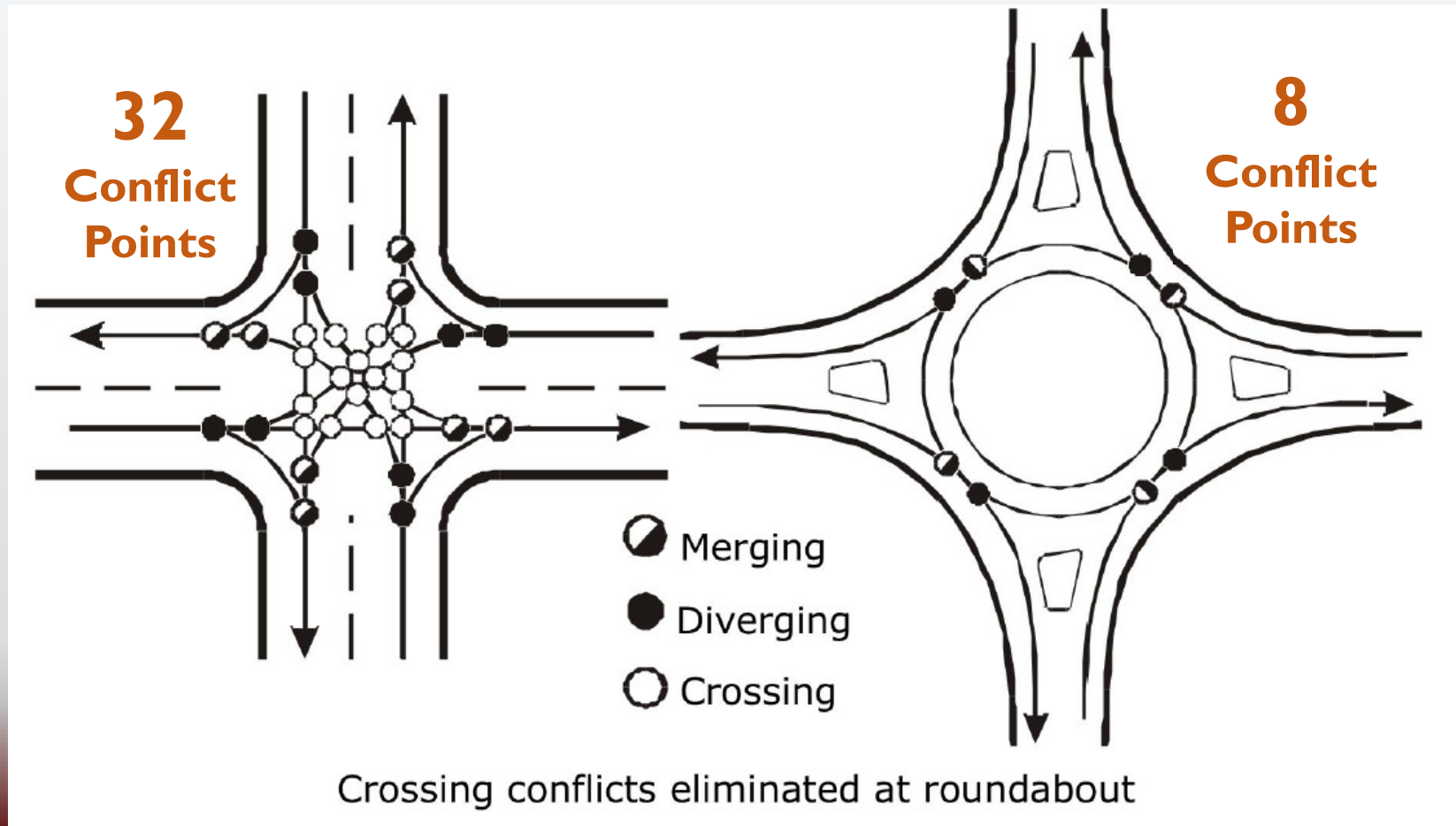
Pros

- Safer pedestrian crossings due to raised medians
- Equal priority to all roads – Traffic on Illinois and Beal will not back up waiting for Thomason.
- Greater traffic capacity
- Lower speeds through intersection – 25 mph design speed
- Lowers incidence of severe crashes

Cons

- Driver unfamiliarity with using this type of intersection
- Will require rebuilding the entire intersection, in multiple phases.

Vehicle Conflict Points



Option Comparison



	Option A: Standard Intersection	Option B: Roundabout Intersection
Meets Purpose & Need		
Operations		
Initial Cost		
Long Term Cost		
Accommodate Pedestrians		
Traffic "Queueing"		
Operating Speeds		
Safety		
Crash Severity		
Pedestrian Refuge		
Overall		

Why a Roundabout?



PEDESTRIAN / BICYCLE TRAFFIC

Advantages

- Pedestrians must only cross one direction of traffic at a time.
- Bicyclists may negotiate roundabout either on sidewalks or on road.

Disadvantages

- Pedestrians with vision impairment may have trouble locating crosswalk and determining when/if vehicles have yielded at crosswalk.

Why a Roundabout?



SAFETY

Advantages

- Reduces Speeds through Intersection
- Reduces crash severity, allows safer merges into circulating traffic, and lower vehicle speeds through intersection.
- Fewer overall conflict point, and no Left-Turn, T-Bone, and Head-On conflicts.

Disadvantages

- Potentially increased single-vehicle conflicts due to unfamiliarity with negotiating through roundabouts.

Why a Roundabout?



OPERATIONS

Advantages

- May have lower delays and queues than other designs.
- Reduces the possibility for interfering with adjacent traffic signals at Loop 250 and Thomason.
- Transition from High-Speed traffic into Residential areas.

Disadvantages

- Equal priority for all approaches can reduce the progression for high volume approaches.

Project Timeline



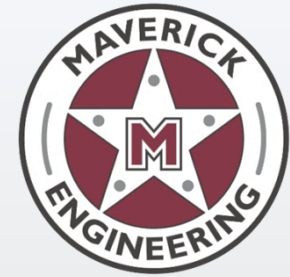
Public Meeting Date	October 14, 2014
Receive Comments	October 21, 2014
Development of Project	October 2014 – Spring 2015
Possible Bid Date	Summer 2015
Possible Start of Construction	Late Summer / Fall 2015

Contact

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QUESTION AND ANSWER

Using a Roundabout Intersection

<http://www.gov.pe.ca/tir/roundabout/flash.php>